

Low Energy Electronic Ignition System for NOFBX Thrusters, Phase I

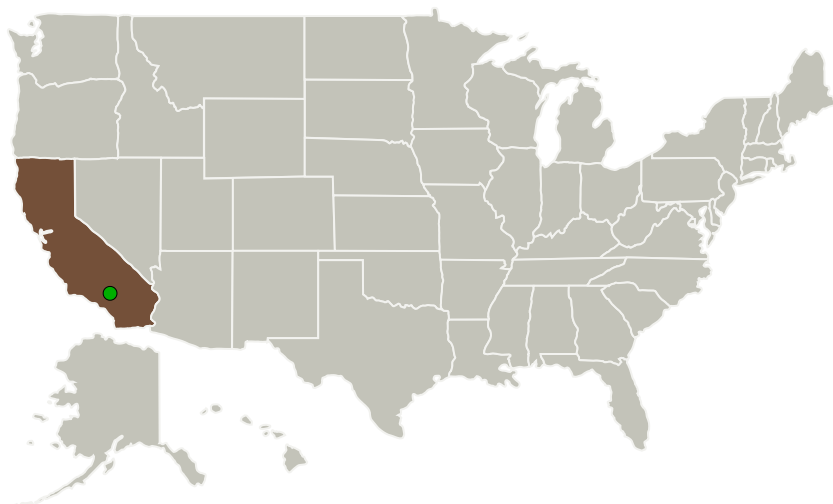


Completed Technology Project (2012 - 2012)

Project Introduction

We propose to develop a miniature, low RF noise ignition module for NOFBX propulsion systems. This ignition module is designed utilizing unique properties of the NOFBX propellant to enable a potential 2-3 order magnitude reduction in spark ignition energy, voltage, current, and power under a very special set of condition realized only in an NOFBX combustion chamber.

Primary U.S. Work Locations and Key Partners



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Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Project Transitions	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	3
Technology Areas	3
Target Destinations	3

Organizations Performing Work	Role	Type	Location
Firestar Engineering, LLC	Lead Organization	Industry	Mojave, California
● Armstrong Flight Research Center(AFRC)	Supporting Organization	NASA Center	Edwards, California

Primary U.S. Work Locations

California

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Project Transitions



February 2012: Project Start



August 2012: Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/140324>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Firestar Engineering, LLC

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Greg S Mungas

Co-Investigator:

Greg Mungas

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Technology Maturity (TRL)

Start: **2**
Current: **3**
Estimated End: **3**



Technology Areas

Primary:

- TX01 Propulsion Systems
 - └ TX01.1 Chemical Space Propulsion
 - └ TX01.1.3 Cryogenic

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System